

. RAZUMOVSKIY, S.D.; BARNITSKIY, I.N.; LYUTYY, V.P.; KIRILLOVA, L.P.

Hydrolysis of ethyl sulfates. Zhur.prikl.khim. 33 no.4:
877-884 Ap '60. (MIRA 13:9)
(Ethyl sulfate)

RAZUMOVSKIY. S. D. Cand Chem Sci -- (diss) "Initiation of polymerization in *oil* emulsions by means of the hydrogen peroxide of *oil* cumene-triethylenetetramine system." Mos, 1959. 8 pp (Min of Higher Education USSR. Mos Inst of Fine Chem Technology), 150 copies (KL, 43-59, 121)

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SOV/64-58-6-2/15

AUTHORS: Kurnosov, M. P., Fedotina, Z. Kh. Razumovskiy, S. D.,
Khanukayeva, Yu. I.

TITLE: The Pyrolysis of Light Distillate Oil (piroliz lazovogo benzina)
Study of Pyrolysis Under Laboratory Conditions (Izucheniye
piroliza v laboratornykh usloviyakh)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 6, pp 330-332 (USSR)

ABSTRACT: In connection with the realization of the plan to step up
the development of the chemical industry also the demand
for ethylene is going to rise rapidly so that it will be-
come necessary to find new sources of raw materials. The
use of liquefied gas obtained from natural gas is of inter-
est from this point of view. Due to the few references obtainable
the present analyses were carried out only on a laboratory
scale. Liquefied gas obtained from Tuymazinsk was used in
the process. The distillation was carried out in a Podbil'-
nyakh column. A schematic drawing of the laboratory unit
used for the pyrolysis is given. The complete analysis of
the gas obtained by pyrolysis was performed by means of the

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The Pyrolysis of Light Distillate Oil
Study of Pyrolysis Under Laboratory Conditions

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apparatus atTsIATIM and the analysis of the unsaturated compounds and hydrogen by means of the apparatus a.VTI. It is pointed out that no far-reaching decomposition of the gasoline is achieved by the pyrolysis of liquefied gas at temperatures below 800°. A lengthening of the contact time does not result in an increase of the ethylene yield. A comparison of the results obtained proves that the ethylene yield is increased when the contact time is shortened while temperature is increased. Moreover, as a consequence of higher temperature, more acetylene is obtained, which again can be turned into ethylene by hydration. Tests in the presence of steam proved that the total amount of coke, resins, and losses is somewhat lower than in the pyrolysis performed in the absence of steam. According to the authors, optimum conditions are: a temperature of 825-835°, a maximum contact time of 1 second, and a dilution with steam to the extent of 10-15 per cent by weight. There are 5 figures, 1 table, and 1 reference, 1 of which is Soviet.

Card 2/2

3/080/60/033/04/22/045

AUTHORS: Razumovskiy, S.D., Bartnitskiy, I.N., Lyuty, V.P., Kirillova, L.P.

TITLE: The Hydrolysis of Ethylsulfates

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 877 - 884

TEXT: The production of synthetic ethyl alcohol by the method of sulfuric acid absorption of ethylene passes through a stage of ethylsulfate formation. This is then subjected to hydrolysis. The hydrolysis rate is investigated here in relation to the temperature and dilution and with regard to studying the effect of these factors on the yields of alcohol and ether. It has been shown that the hydrolysis rate increases with the temperature. An extract obtained by the Orskiy zavod sinteticheskogo spirta (Orsk Plant of Synthetic Alcohol) with a specific gravity of 1.33 - 1.35 and a content of sulfuric acid of 70% and a saturation of 1.1 mole of ethylene per 1 mole of H_2SO_4 was hydrolyzed. Under industrial conditions it is expedient to carry out hydrolysis at a temperature of 100°C. Diethylsulfate is hydrolyzed considerably more quickly than monoethylsulfate; the hydrolysis rate of the extract in the whole is limited by the rate of monoethyl disappearance. Within the range of 70 - 100°C the yields of alcohol and ether do not change noticeably with the temperature; beyond 110°C the thermal decomposition of

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The Hydrolysis of Ethylsulfates

s/080/60/033/04/22/045

ethylsulfates starts with the liberation of C_2H_4 and SO_2 and the alcohol yield decreases. The maximum yield of alcohol is obtained in case of the ratio extract : water = 1:1.33 based on weight. In the case of the change of this ratio the yields of alcohol decrease. The hydrolysis of the extract by water steam even after preliminary partial solution with water produces no positive results: the yield is low. Ether is formed in the hydrolysis of the extract at the expense of diethylsulfate. The optimum conditions for hydrolysis of the extract in the industry are: a temperature of $100^{\circ}C$ and a dilution with water in the ratio 1:1.1 based on weight. There are: 3 graphs, 3 tables and 7 references, 4 of which are Soviet, 2 American and 1 German.

SUBMITTED: April 18, 1959

Card 2/2

RAZUMOVSKIY, S.D.; SEMENOVA, L.S.; KULICHENKO, L.I.

Pyrolysis of direct benzene distillate into ethylene. Khim.prom.
no.1:19-23 Ja-F '60. (MIRA 13:7)
(Benzene) (Ethylene)

KULICHENKO, L.I.; RAZUMOVSKIY, S.D.; SEMENOVA, L.S.

Pyrolysis of hydrocarbon gas mixtures containing ethylene. Gaz. prom.
4 no.11:40-43 '59. (MIRA 13:2)
(Hydrocarbons) (Ethylene)

RAZUMOVSKIY, S.D.; MEDVEDEV, S.S.

Polymerization of styrene in emulsion initiated by the cumene
hydroperoxide - triethylenetetramine system. AN SSSR. Otd. khim.
nauk no.9:1088-1093 S '58. (MIRA 11:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.
Lomonosova.

(Stylene) (Polymerization)

S/064/60/000/01/03/024
B022/B008

AUTHORS: Razumovskiy, S. D., Semenova, L. S., Kulichenko, L. I.

TITLE: Pyrolysis of Straight-run Gasoline to Ethylene¹

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 1, pp. 19 - 23

TEXT: The selection of optimum conditions for the pyrolysis of straight-run gasoline to ethylene in an industrial pipe still was the problem, for the purpose of which the paper under review was elaborated. The laboratory unit used and mode of operation are described and it is mentioned that the complete analysis of pyrolysis products was carried out in the TsIATIM apparatus, and in individual cases in the VTI device. The composition of the gasoline used, and of the cracked gas is mentioned. The composition of the reaction products and the yield of acetylene at the pyrolysis of straight-run gasoline in the absence of diluents (Table 1), in a mixture with a vapor content of up to 20% (Table 2) and up to 100%, related to the weight of the gasoline (Table 4) are mentioned next. The results obtained under the same conditions (825°) at the pyrolysis of butane, light gasoline, and straight-run gasoline are mentioned (Table 3). The results

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Pyrolysis of Straight-run Gasoline to Ethylene S/064/60/000/01/03/024
B022/B008

of the pyrolysis of straight-run gasoline and cracked gas (Table 5), methane (Table 6), and a comparison of the results obtained with and without methane (Table 7) are mentioned. Conditions for the pyrolysis of straight-run gasoline to ethylene in pipe stills are recommended on the basis of all results obtained (Table 8). The Orskiy zavod sinteticheskogo spirita (Orsk Plant for Synthetic Alcohol) is mentioned. There are 8 tables and 9 references, 5 of which are Soviet. ✓

Card 2/2

AUTHORS: Razumovskiy, S. D., Medvedev, S. S. SOV/62-58-8-10/22

TITLE: Kinetics of the Reaction of Cumene Hydrogen Peroxide With Triethylene Tetraamine in the Presence of Iron Salts in Aqueous Solutions (Kinetika reaktsii gidroperekisi kumola s trietilentetraaminom v prisutstvi soly zheleza v vodnykh rastvorakh)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 8, pp. 973-980 (USSR)

ABSTRACT: Lately the methods of the arrangement of processes with radicals by means of redox reactions have been employed more and more in the production of high-molecular products. The peroxide compounds are the oxidation components used most. In publications there exist various papers on this subject (Refs 1-9), among them also that by Orr and Williams (Orr and Vilyams, Refs 8,9). The papers published hitherto have, however, not at all explained the role played by the iron in the reaction (and the dependence of the rate of reaction on the concentration of the iron). The present paper deals with the explanation of this problem. The experiments demonstrated that the reaction between cumene hydrogen peroxide and triethylene tetraamine takes

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Kinetics of the Reaction of Cumene Hydrogen Peroxide With Triethylene
Tetraamine in the Presence of Iron Salts in Aqueous Solutions SOV/62-58-8-10/22

place only in the presence of iron. The activity of the iron salts mainly depends on the conditions of the experiment, and may be explained by the salt hydrolysis. It was also found that the amine has the capability of reducing the iron salts in acid as well as in alkaline medium. The course of the reaction with respect to all reaction components was determined more accurately. The activation energy of the entire reaction was calculated. The rules governing the change of the concentration of hydroperoxide were determined. Finally the constants of the summary equation were calculated. There are 7 figures, 2 tables, and 21 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy Institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

SUBMITTED: January 14, 1957

Cat: 2,2

AUTHORS: Razumovskiy, S. D., Medvedev, S. S. SOV/62-58-9-11/26

TITLE: Styrene Polymerization in Emulsion Under the Influence of the Initiating System Cumene-Triethylene-Tetramine Hydroperoxide (Polimerizatsiya stirola v emul'sii pod vliyaniyem initsiiiruyushchey sistemy gidroperekis' kumola-trietilen-tetramin)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye Khimicheskikh nauk, 1958, Nr 9, pp 1088 - 1093 (USSR)

ABSTRACT: The initiation of polymerization by oxidation and reduction in aqueous emulsions has found wide-spread use. The system hydroperoxide-polyethyleneamine serves as an example of the oxidation-reduction system. Its polymerization initiating effect proved to be sufficient in the co-polymerization of divinyl with styrene. The reaction between the hydroperoxides and polyamines has been the subject of countless investigations (Refs 5-8). In the present paper the authors are concerned with the kinetics of the reaction between cumene hydroperoxide and triethylenetetramine in an emulsion

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Styrene Polymerization in Emulsion Under the Influence of the Initiating System Cumene-Triethylene-Tetramine Hydroperoxide

SOV/62-58-9-11/26

medium, as well as the polymerization kinetics of the hydroperoxide-polyethyleneamine system already mentioned. It was found that the rate of reaction depends upon the concentration of the reactants. On the basis of the experimental results obtained several considerations arise in regard to the mechanism of the reaction. The kinetics of the polymerization reaction of styrene in emulsion and under the cumene-hydroperoxide-triethylene-tetramine system were investigated. It was found that the polymerizing effect of this system is actually very small. There are 11 figures and 8 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im.M.V.Lomonosova (Moscow Institute for Fine Chemical Technology imeni M.V.Lomonosov)

SUBMITTED: February 7, 1957
Card 2/2

PEREVESINSKIY, I.F.; KUZNETSOVA, A.P.; RAZUMOVSKIY, S.D.

Comprehensive processing of pyrolysis tar and of a heavy absorbent.
Khim. prom. no. 2:101-105 F '61. (MIRA 14:4)
(Coal tar products)

RAZUMOVSKIY, S. L.

32461. Tunnel'naya prokhodka kanalizatsionnykh kollektorov v Leningrade. (Doklad na konferentsii, sozv. Nauch.-issled. in-tom kommunal. khozyaystva Ispolokoma Lengorsoveta, May 1949 g.) Materialy po kommunal. khoz-vu, 1949, sb. 3, s. 56-61

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

KISELEVA, K.V.; RAZUMOVSKIY, S.M.

Some principles of the distribution of the flora by plant communities. Bot. zhur. 48 no.9:1373-1380 S '63.

(MIRA 16:11)

1. Botanicheskiy sad Moskovskogo gosudarstvennogo universiteta i Glavnyy botanicheskiy sad AN SSSR, Moskva.

RAZUMCVSKIY, S.N.

Transformation of programs for solving complex logical problems
to the optimum form. Dokl. AN SSSR 139 no.3:562-565 J1 '61. (MIRA 14:7)

1. Predstavleno akademikom A.I. Bergom.
(Symbolic and mathematical logic)
(Programming (Electronic computers))

RAZUMOVSKIY, S. N.

(Spartak Nikolayevich)

5
I-FW

* Карпов, К. А.; и Разумовский, С. Н. [Карпов, К. А.; and Razumovskii, S. N.] Таблицы интегрального логарифма. [Tables of the integral logarithm] Izdat. Akad. Nauk SSSR, Moscow, 1956. 319 pp. 33.30 rubles.

This is a table of $\text{li } x = \int_0^x dt/\ln t$ to 7S for

$x = 0(.0001)2.5(.001)20(.01)200(.1)500(1)1000(10)25000$.

It is stated that the results are correct to within .6 of a unit in the last place. The table was computed on the BESM (see S. A. Lebedev, J. Assoc. Comput. Mach. 3 (1956), 129-133; MR 18, 339), using Simpson's rule.

In general, linear interpolation gives an error not exceeding 1.6 units. However, in the ranges (0, .0403), (.95, 1.05) and (1.4477, 1.4551), the latter including the zero 1.4513... of $\text{li } x$, other methods are required. For the intervals (.0017, .0403) and (1.4477, 1.4551), quadratic interpolation gives an error not exceeding 1.8 units. To facilitate this, first and second differences are given in the range (0, .05) and a table of $\frac{1}{2}(1-t)$ to 4D for $t = 0(.01).5$ is provided. In the interval (.95, 1.05), linear interpolation in the auxiliary table of $\text{li } x = \ln |1-x|$, given to 7D for $x = .95(.0001)1.65$, is satisfactory. In the ranges (.00000031,

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Karpov, K. A.

.0017) and (25000, 3269000), it is suggested that values be obtained from tables of the exponential integral in the same series [Tables of the function $w(z) = e^{-z} \int_0^z e^{x^2} dx$ in a complex region, Izdat. Akad. Nauk SSSR, Moscow, 1954; MR 16, 749], using $\text{li } x = \text{Ei}(\ln x)$. For (0, .00000031) and (3269000, ∞), use of the asymptotic series is recommended. There are worked examples showing the methods in use in different ranges.

The main table gives 500 values on an opening, no differences being given; in the range (0, .5), there are two columns on each page, each giving 50 values of $\text{li } x$ and the first two differences. The table is clearly printed.

John Todd (Pasadena, Calif.)

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RAZUMOVSKIY, S. N.

✓ 1971

EXPERIMENTS WITH AN AUTOMATIC TRANSLATOR ON
ELECTRONIC CALCULATING MACHINE BESM. G. P.
Zelenkovic, L. N. Korolev, and S. N. Razumovskiy (Inst. of
Precision Mechanics and Computing Techniques Akad. of
Science S.S.S.R.). Priroda 45, 81-5 (1956) Aug. (In Russian)
Descriptions are given of the principle and scheme of the
automatic translation machine, translating from English
into Russian. (R.V.J.)

Phys

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AUTHOR: RAZUMOVSKIY, S.N. PA - 3037
 TITLE: On the Problem of the Automation of the Programming of Translations
 from One Language into Another. (K voprosu ob avtomatizatsii program-
 mirovaniya zadach perevoda s odnogo yazyka na drugoy, Russian)
 PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 760-761 (U.S.S.R.)
 Received: 6 / 1957 Reviewed: 7 / 1957
 ABSTRACT: For such programs the following is characteristic: The programs act
 only upon a certain part of the brain cell, and there is a large num-
 ber of correlations between the various parts of such a program. The
 optimum selection of these parts leads to the following problem: The
 condition of the maximum utilization of memory is to be coordinated as
 best as possible with the condition of the minimum intersection of cor-
 relations. The scheme of the problem of translation from the English
 into the Russian language can be represented in form of sequences of
 three types of operators (logical, identical, and arithmetical opera-
 tors). The same representation is possible also in the case of trans-
 lation from other languages, as e.g. German, Japanese, or Chinese.
 The logical operator is built up from the correlations of the initial
 calculation: conjunction, disjunction, implication, and negation. The
 author then gives a short definition of the identical and of the
 arithmetical operator.
The system of codifying informations: The author here describes the in-
 formation concerning a sign of the operator-like writing out as
 "elementary information". In addition to every elementary information

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PA - 3037

On the Problem of the Automation of the Programming of Translations
from One Language into Another.

there belongs a statement as to which of the following three groups
it belongs to: 1.) Number of operators, 2.) Letters, indices, and operator signs, 3.) Numbers (figures). Numbers of operators are written down with the help of corresponding double numbers. For the writing down of letters and signs a special system of codification was worked out.

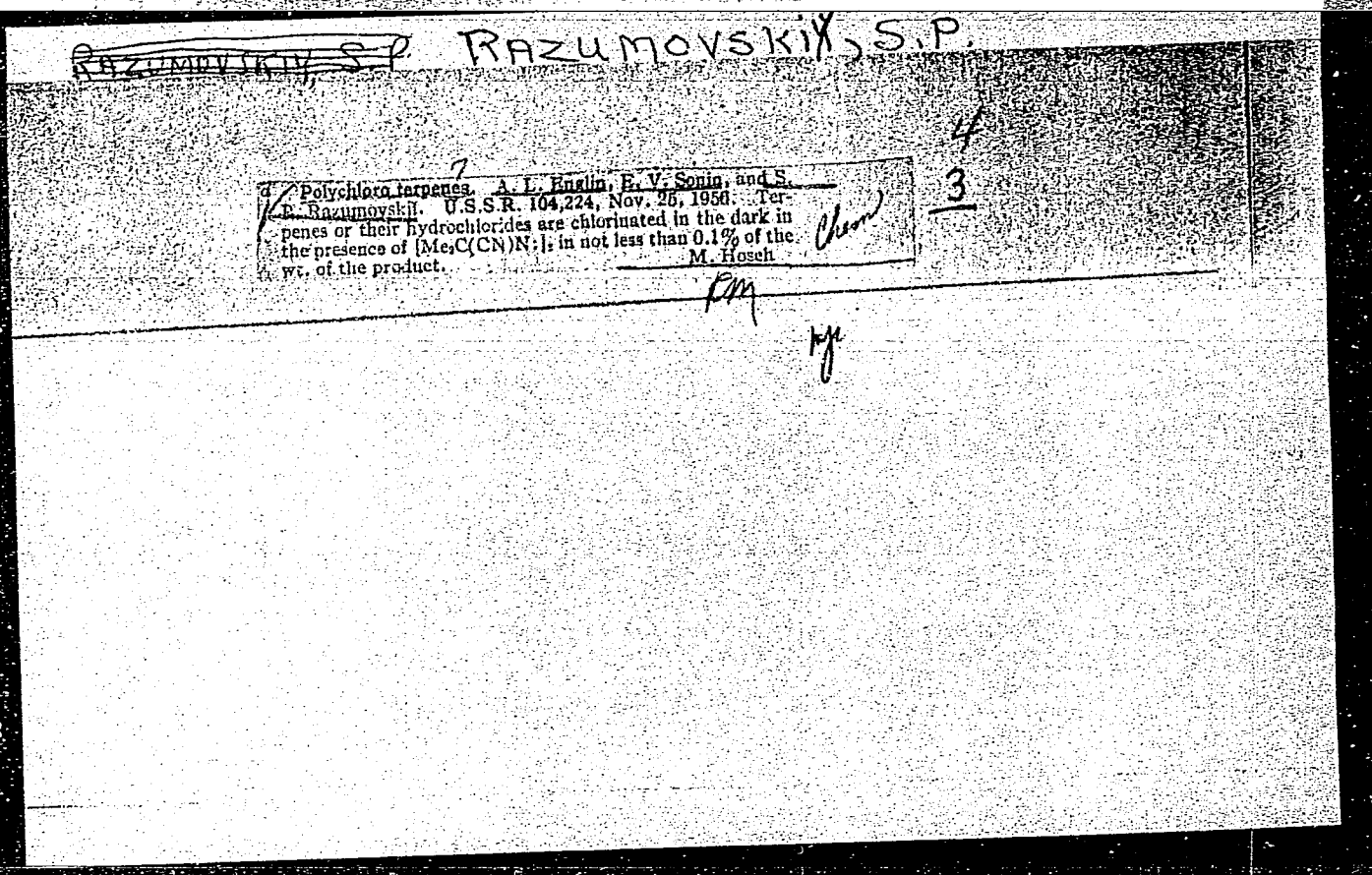
The programming program consists of several programs: Basic program, program of the synthesis of the logical operators, program of the synthesis of identical operators, program of the synthesis of the arithmetical operators, program of the division of the constructed program into parts. In conclusion, the order in which the work of the program is carried out is given. (No Illustrations).

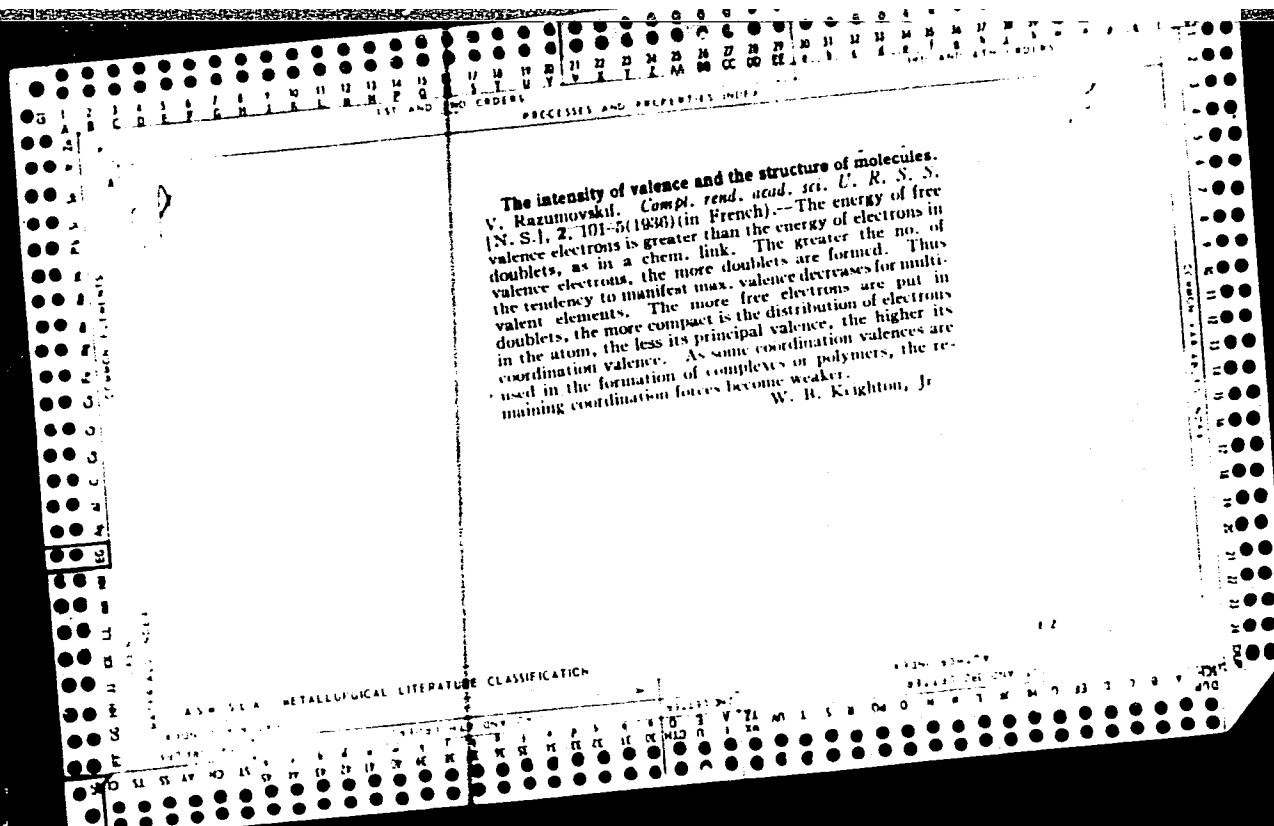
ASSOCIATION: Institute for Fine Mechanics and Computing Technique of the Academy of
Science of the USSR
PRESENTED BY: M.A.LAVRENT'YEV, member of the Academy
SUBMITTED: 10.10.1956
AVAILABLE: Library of Congress

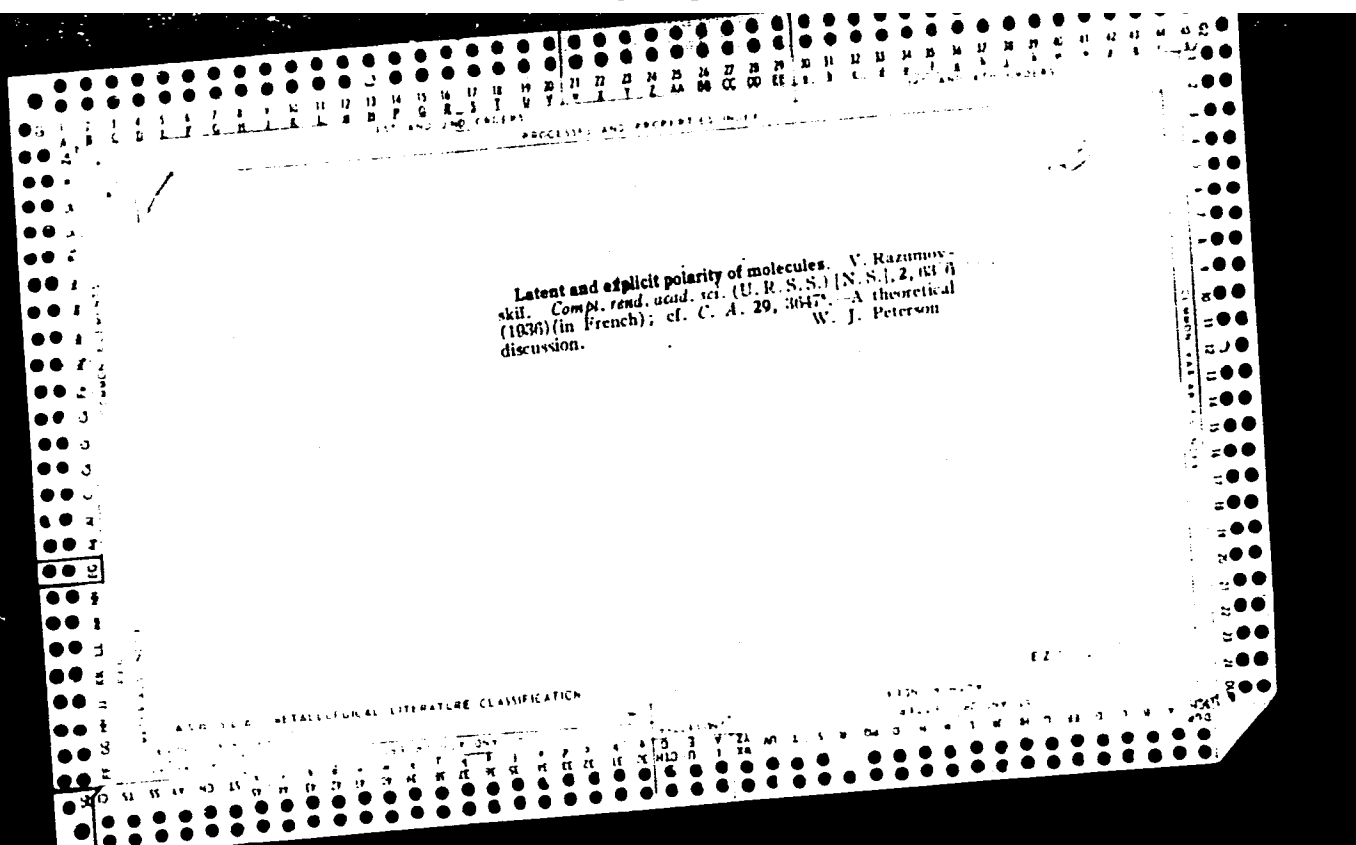
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RAZUMOVSKIY, S.P., inzh.

Asynchronous start of generators at rural hydroelectric power stations.
Mekh. i elek. sots. sel'khoz. 15 no.1:32-35 58. (MIRA 11:3)
(Electric generators)







AUTHORS: Yakubovich, A., Razumovskiy, V., SOV/79-28-8-63/66
Rozenshteyn, S.

TITLE: Syntheses of the Vinyl Monomers (Sintezy vinilovykh monomerov)
V.Syntheses of the Cyano-Substituted Acrylates (V.Sintezy
tsianzameshchennykh akrilatov)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8,
pp. 2292 - 2295 (USSR)

ABSTRACT: Among the great number of esters of acrylic acid and
methacrylic acid described in the literature the esters
of the cyano-substituted alcohols have been little inves-
tigated. The syntheses of the smaller monomeric esters
(Refs 1-3) and their properties have been insufficiently
treated. The authors investigated these esters at great
length and synthesized according to known methods the
 α -cyanoethyl, α -cyanobenzyl and the p-cyanophenyl esters of
methacrylic acid hitherto not described. Also synthesized
as side products to these esters were the previously unknown
cyano-substituted metylamide of methacrylic acid,
Card 1/3 $\text{CH}_2=\text{C}(\text{CH}_3)\text{CONHCH}_2\text{CN}$, by reacting methacrylic chloride with

Syntheses of the Vinyl Monomers. V. Syntheses of the
Cyano-Substituted Acrylates

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the free aminoacetonitrile in acetone; and the derivative of α -cyanoacrylic acid, vinylidene cyanide and the methyl ester of this acid. The methods suggested in the literature were modified somewhat. The literature data on α -cyanoacrylic acid are very scanty and are given in only two patents (Ref 7). Methyl- α -cyanoacrylate was synthesized with the help of two methods described in the patents. In one case methylcyanoacetate and chloromethylacrylate were used as starting materials, while in the other case methylcyanoacetate and formaldehyde were used (see both reaction diagrams). Nevertheless, the monomeric methyl- α -cyanoacrylate indicated in the patent was not obtained, but instead the reaction gave a somewhat solid, partially polymerized product. In order to obtain the monomeric ester it was necessary to warm this product with phosphorous pentoxide in order to depolymerize it. The second method is more practical and also gives better yields of methyl- α -cyanoacrylate. There are 11 references, 3 of which are Soviet.

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Syntheses of the Vinyl Monomers. V. Syntheses of the
Cyano-Substituted Acrylates

SOV/79-28-8-63/66

SUBMITTED: June 3, 1957

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MISHCHENKO, K.; SHCHUKAREV, S.; AKHUMOV, Ye.; RAZUMOVSKIY, V.

Vasilii Ivanovich Semishin, 1904- . izv. vyzn. uchob. zav. ; Khim.
i khim. tekhn. 7 no.3:528 '64.

(MIRA 17:10)

YAKUBOVICH, A.; RAZUMOVSKIY, V.; ROZENSHTEYN, S.

Synthesis of vinyl monomers. Part 5: Synthesis of cyano
substituted acrylates. Zhur. ob. khim. 28 no. 8:2292-2295 Ag '58.

(MIRA 11:10)

(Acrylic acid)
(Vinyl compounds)

RAZUMOVSKIY, V.

Tamed wind, IUn.nat. no.7:16 J1 '52.

(LRA 10:8)

1. Nirovskaya oblast', Tataurovskaya srednyaya shkola.
(Windmills)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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PROCESSES AND PROPERTIES INDEX

Polarity and tautomerism. V. Razumovskii. *Compt. rend. acad. sci. U. R. S. S. (N. S.)*, 2, 381-7 (1936) (in French); *cl. C. A.* 30, 5550.---A theoretical discussion. John R. Millery

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION ONE

SECTION TWO

SECTION THREE

SECTION FOUR

SECTION FIVE

SECTION SIX

SECTION SEVEN

SECTION EIGHT

SECTION NINE

SECTION TEN

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SECTION TWELVE

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SECTION FOURTEEN

SECTION FIFTEEN

SECTION SIXTEEN

SECTION SEVENTEEN

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SECTION TEN HUNDRED NINE

RAZUMOVSKIY, V.G. (Moskva); BRAVERMAN, E.M. (Moskva); POPOV, I.V. (Orel)

Brief news. Fiz. v shkole 23 no.3:110-112 My-Je '63.

(MIRA 16:12)

POKROVSKIY, A.A., kand.pedagog.nauk, starshiy nauchnyy sotrudnik;
 BUROV, V.A., uchitel'; GLAZYRIN, A.I., starshiy nauchnyy sotrudnik,
 pensioner; DUBOV, A.G., starshiy nauchnyy sotrudnik; ZVORYKIN, B.S.,
 nauchnyy sotrudnik; KAMENETSKIY, S.Ye., uchitel'; KOSTIN, G.N., pre-
 podavatel'; MIRGORODSKIY, B.Yu., uchitel'; OREKHOV, V.P., prepoda-
 vatel'; ORLOV, P.P., prepodavatel'; RAZUMOVSKIY, V.G., aspirant;
 RUMYANTSEV, I.M., aspirant; TEREENT'YEV, M.M., prepodavatel';
 KHOLYAPIN, V.G., prepodavatel'; SHAKHMAYEV, N.M., nauchnyy sotrudnik,
 uchitel'; VOYTENKO, I.A., uchitel' sredney shkoly, pensioner; STA-
 ROSTIN, I.I., prepodavatel'; MOGILKO, A.D., aspirant; SEMAKIN, N.K.;
 KOPECHKOVA, L.A., red.; LAUT, V.G., tekhn.red.

[New school equipment for use in physics and astronomy] Novye
 shkol'nye pribory po fizike i astronomii. Pod red. A.A.Pokrovskogo.
 Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1959. 161 p. (MIRA 12:11)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut metodov
 obucheniya. 2. Laboratoriya metodiki fiziki Instituta metodov obuche-
 niya Akademii pedagogicheskikh nauk RSFSR (for Pokrovskiy). 3. Sred-
 nyaya zheleznodorozhnaya shkola st.Kratovo, Moskovskoy oblasti (for
 Burov). 4. Institut metodov obucheniya Akademii pedagogicheskikh nauk
 (for Glazyrin, Dubov, Razumovskiy, Rumyantsev).

(Continued on next card)

POKROVSKIY, A.A.---(continued) Card 2.

5. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.315 Moskvy (for Zvorykin). 6. Srednyaya shkola No.212 Moskvy (for Kamenetskiy). 7. Krasnodarskiy pedinstitut (for Kostin). 8. Srednyaya shkola No.18 g.Smy (for Mirgorodskiy). 9. Ryazanskiy pedinstitut (for Orekhov). 10. Stalingradskiy pedinstitut (for Orlov). 11. Moskovskiy gorodskoy pedinstitut; srednyaya shkola No.443 Moskvy (for Terent'yev). 12. Balashevskiy pedinstitut (for Kholyapin). 13. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.215 Moskvy (for Shakhmayev). 14. Moskovskiy pedinstitut im. V.I.Lenina (for Sterostin). 15. Pedinstitut im. V.I.Lenina v Moskve (for Mogilko). 16. Zaveduyushchiy narodnoy astronomicheskoy observatoriyey Dvortsa kul'tury Moskovskogo avtozavoda im. Likhacheva (for Semakin).

(Physical instruments)

RAZUMOVSKIY, V.G.; MEDVEDEV, R.A.

Development of research abilities in students. Politekh.obuch.
no.3:63-67 Mr '59. (MIRA 12:4)
(Physics--Study and teaching)

RAZUMOVSKIY, V.G.

Constructive application of knowledge in club work. Politekh.
obuch. no.12:62-65 D '58. (MIRA 11:12)
(Activity programs in education)

RAZ' MOVSKIY, V.G.

Original work by students in a physics and technology club. Politekh.
obuch. no. 4:70-76 Ap '58. (MIRA 11:3)
(Physics--Study and teaching)

RAZUMOVSKIY, VASILII IVANOVICH

DECEASED

(1957-1958)

see ILC

SURGERY

1. RAZUMOVSKIY, V.K.
2. USSR (600)
4. Spinning
7. Method of continuous joining. Tekst. prom. 12. no. 11. 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

SMIRNOV, L.A., otv.red.; BEKETOV, A.K., red.; GRIGOR, V.I., dotsent, red.; ZAKHAROV, V.A., red.; KRIVOSHEYEV, A.K., dotsent, red.; NEVEDROV, A.T., red.; RAZUMOVSKIY, V.N., dotsent, red.; NIKOLAYEVA, T.A., red.izd-va; NAZAROVA, A.S., tekhn.red.

[Planning, building, and improving cities] Planirovka, zastroika i blagoustroistvo gorodov. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 179 p. (MIRA 13:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. 2. Predsedatel' pravleniya Rostovskogo otdeleniya Soyuza arkhitektorov SSSR (for Grigor). 3. Nachal'nik otdela po delam stroitel'stva i arkhitektury Rostovskogo oblispolkoma (for Zakharov). 4. Zaveduyushchiy kafedroy arkhitektury Novocherkasskogo Ordена Trudovogo Krasnogo Znameni politekhnicheskogo instituta imeni S.Ordzhonikidze (for Krivosheyev). 5. Kafedra arkhitektury Rostovskogo inzhenerno-stroitel'nogo instituta (for Razumovskiy).
(City planning) (Apartment houses)

RAZUMOVSKIY, Vyacheslav Pavlovich; BOTASHEV, N.S., retsenzent; SOSKIN, M.D., red.; LUCHKO, Yu.V., red.izd-vs; TURKINA, Ye.D., tekhn.red.

[Handbook for crane operators; manual for individual and team training under operating conditions] Rukovodstvo dlia podkra-
novykh rabochikh; uchebnoe posobie dlia individual'no-brigadnogo
obucheniia rabochikh na proizvodstve. Sverdlovsk, Gos.nauchno-
tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe
otd-nie, 1960. 151 p. (MIRA 14:3)

(Cranes, derricks, etc.)

Razumovsky, V.V.

82678

8/17/86/030/001/008
8001/004

5.3831
AUTHORS:

Lavrovich, A. Ya., Bogdanovskiy, N. A., Pavlov, Ya. P.,
Belzyeva, I. N., Razumovsky, V. V.

TITLE:
Synthesis of Vinyl Monomers. II. The Synthesis of
α-Chloroacrylates and α-Chloroacrylates

PERIODICAL:
Zhurnal Obshchei Khimii, 1960, vol. 30, No. 8,
pp. 2436 - 2490

NOTE: The authors report on the following synthesis: α-chloro-hydroxy
propionitrile (1) from aqueous solution of acrylonitrile by introduction
of chlorine gas at 160°C. The compound (1) was isolated with ether. Yield:
36.5%. α-chloro-β-acetoxy propionitrile (2) from 1 by heating with
acetic anhydride and sodium acetate over the water bath (yield 53.6%).
Methyl-α-chloro-β-hydroxy propionitrile (3) by chlorinating methyl acrylate
(yield 23.5%). Methyl-α-chloroacrylate (4) a) by dropping 3 into acetic
anhydride and sodium acetate (yield 74%) heated to 125-130°C; b) by dropping
4 into a mixture of P₂O₅ and Cu₂Cl₂ (yield 64%). α-chloroacrylonitrile (5)

Card 1/2

by heating 1 with sodium bisulfate. Phenyl-α-chloroacrylate (6) by alkyl-
ation of triethylamine solved in benzene to phenyl-α-β-dichloropropionate
solved in benzene, filtering of the triethylamine hydrochloride,
precipitate, distilling off of benzene and the excessive triethylamine,
fractionating the residue in the presence of phenyl-β-naphthyl-amine
(yield 49%). In 6 the authors found the refractive index n_D^{20} to be
1.5323. They consider this value to be more correct than that of 1.5024
given in Ref. 3. There are 4 non-Soviet references.

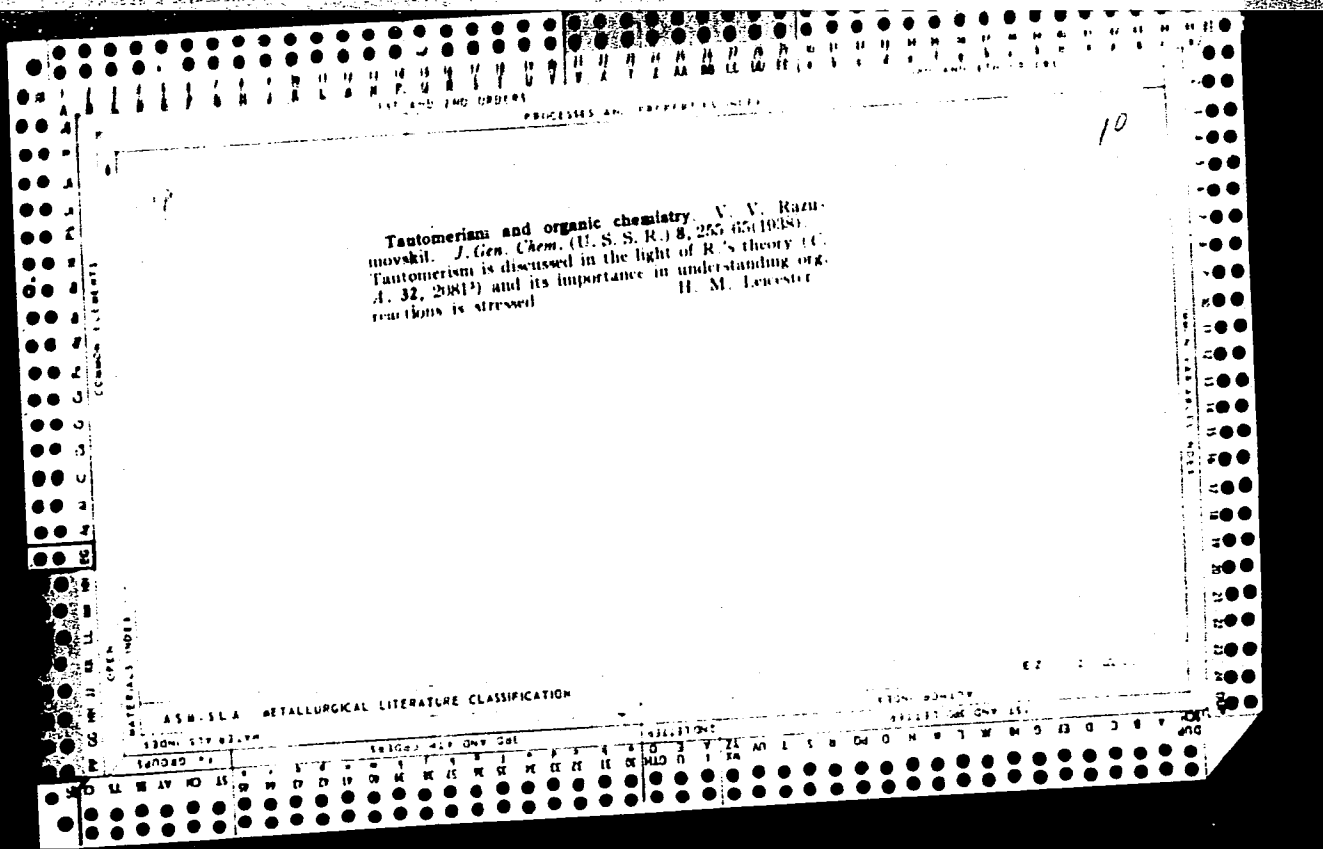
SUBMITTED: July 31, 1959

Card 2/2

The structure and properties of organic compounds. I. Structure and the polar properties of molecules. V. V. Ruzumovskii. *J. Gen. Chem. (U. S. S. R.)* 7, 2344-55 (1937).—A theoretical discussion of the localization of electrons in chem. bonds indicates that the basic factors for polarity are the nearness of the electrons to the nucleus and the length of time they remain in a given position. **II. Structure and acid or basic properties of molecules.** *Ibid.* 2356-60.—The relative strength of org. acids and amines is dependent upon the localization of the electron in the bonds. **III. Bond energy and the degree of saturation of the molecule.** *Ibid.* 2448-56.—Since the localization of the electrons differs in different bonds, the relative strengths of the 2 bonds in a double bond differ and the various degrees of unsat. in org. compds. can be explained on this basis. **IV. Compounds of high molecular weight.** *Ibid.* 2626-32.—The greater the tendency toward ionization in a bond, the less tendency exists for the compd. to polymerize. Numerous examples are given to show the relation between polarity and polymerization. H. M. Leicester

H. M. Leicester

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDER										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDER									
<p>8</p>										<p>The structure and properties of organic compounds of high molecular weight. V. V. Razumovskii. <i>J. Gen. Chem.</i> (U. S. S. R.) 9, 400-6(1939); cf. <i>C. A.</i> 33, 90019. The ability of a substance to crystallize is detd. by the mobility of its electron structure. The greater the electron mobility, the less the tendency to crystallize, but the greater the stability of the crystals, once they are formed. These principles are applied to the discussion of the stability and structure of various polymers. H. M. L.</p>										<p>2</p>									
<p>ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																													
<p>1ST AND 2ND ORDER</p>										<p>3RD AND 4TH ORDER</p>										<p>1ST AND 2ND ORDER</p>									

CP.

3

The electronic structure of organic compounds. V. V. Razumovskii. *J. Gen. Chem.* (U. S. S. R.) 0, 2019-10 (1939); cf. C. A. 13, 9063P. The main difference between polar and nonpolar org. compds. lies in the mobility of the electron structure. The degree of polarity is higher in the mol. with less mobile electron structure which shifts the charge on the atom with difficulty. There are two polar forms in each org. compd.: inductive and alternative polar forms which are interchangeable under the influence of outside factors. The arrangement of atoms in the mol. is more stable if the electron structure is more mobile. The inner rearrangement of org. compds. leads to the formation in the mol. of either more stable electron arrangement or more stable atom arrangement. About 64 references. A. A. Podgoruy.

ASAC 114 METALLOGRAPHIC LITERATURE CLASSIFICATION

0a

10

1ST AND 2ND CORDS

3RD AND 4TH CORDS

PROCESSES AND PROPERTIES INDEX

CLASSIFICATION INDEX

THE NATURE OF OLEFINIC BONDS IN OLEFINIC CARBONYL COMPOUNDS. V. V. RAZUMOVSKI, *J. Gen. Chem. (U.S.S.R.)* 10, 1851 2 (1940). R. discusses Chelintsev's and Kozlov's theories (C. A. 34, 4058) of the nature of the double bond in olefinic carbonyl compds. He comes to the following conclusions: the nature of ethylenic bonds in various org. compds. is the same; the ethylenic linkage in carbonyl olefins is ionized more than in olefins or in dienes; the specific peculiarity of the ethylenic linkage in olefinic carbonyl compds. is due to the character of the circulation of its electrons; the properties of the ethylenic linkage of olefinic carbonyl compds. do not depend upon the conjugation of the system.

DAVID AELONY

ASAC, SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CORDS

3RD AND 4TH CORDS

5TH AND 6TH CORDS

7TH AND 8TH CORDS

9TH AND 10TH CORDS

11TH AND 12TH CORDS

13TH AND 14TH CORDS

15TH AND 16TH CORDS

17TH AND 18TH CORDS

19TH AND 20TH CORDS

21ST AND 22ND CORDS

23RD AND 24TH CORDS

25TH AND 26TH CORDS

27TH AND 28TH CORDS

29TH AND 30TH CORDS

31ST AND 32ND CORDS

33RD AND 34TH CORDS

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37TH AND 38TH CORDS

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67TH AND 68TH CORDS

69TH AND 70TH CORDS

71ST AND 72ND CORDS

73RD AND 74TH CORDS

75TH AND 76TH CORDS

77TH AND 78TH CORDS

79TH AND 80TH CORDS

81ST AND 82ND CORDS

83RD AND 84TH CORDS

85TH AND 86TH CORDS

87TH AND 88TH CORDS

89TH AND 90TH CORDS

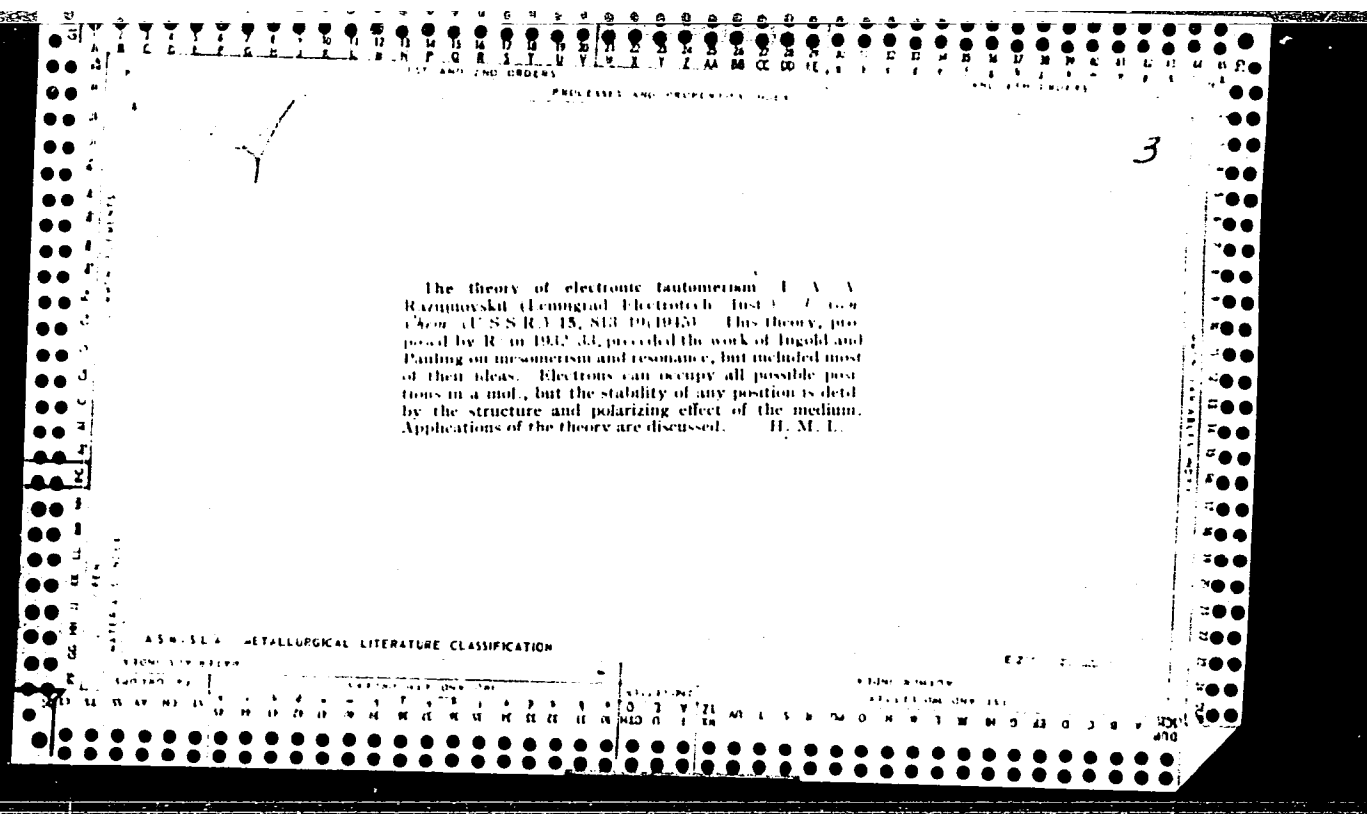
91ST AND 92ND CORDS

93RD AND 94TH CORDS

95TH AND 96TH CORDS

97TH AND 98TH CORDS

99TH AND 100TH CORDS



RAZUMSKY, V. V.

" Electronic tautomerism theory. II " by V. V. Razumsky (p. 500)

CC: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1946, Volume 16, No. 3

CA

Processes and Properties Index

Bivinyll. V. V. Razumovskii and V. A. Pokrovskii.
U.S.S.R. 68,428, May 31, 1947. Bivinyll is produced by
catalytic decompn. of EtOH by Cr oxides deposited on
Al₂O₃ as catalyst. M. Hosh

10

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

530MI STIVINLYN

530MI 20MIRV

530MI 20MIRV

GROUPS																									
GROUPS 1-10													GROUPS 11-26												
GROUPS 1-10													GROUPS 11-26												
<p>CA</p> <p>10</p> <p>Electronic organic chemistry and the paths of its development in the U.S.S.R. over the 1917-1947 period. V. V. Razumovskii. <i>J. Gen. Chem. (U.S.S.R.)</i> 17, 1981-92(1947).—Review with 61 references. G. M. K.</p> <p>ASAC 100 METALLURGICAL LITERATURE CLASSIFICATION</p>																									

CA 10

Electronic theory in organic chemistry. V. V. Razu-
movskii. *Prirada* 36, No. 1, 12-26(1947). Review; 32
references. N. Thon

ASH-5LA METALLURGICAL LITERATURE CLASSIFICATION

RAZUMOVSKIY, V. V.

PA 78T3

USSR/Aeronautics
Oxygen Liquid
Airplanes - Equipment

Apr 1948

"Liquid Oxygen in Aviation," V. V. Razumovskiy, 2 pp

"Priroda" No 4

Discusses subject generally, then describes RCAF
apparatus designed by Toronto University.

78T3

RAZUMOVSKIY, V. V.

PA 5/49T13

USSR/Chemistry - Chemical Industry,
Production in
Chemistry - Chemical Industry,
Progress in

May 48

"The Swedish Chemical Industry," V. V. Razumovskiy,
1 p

"Priroda" No 5

Reviews development of Swedish chemical industry
during World War II. Lists products made by
various firms.

5/49T13

PA 2/49775

RAZUMOVSKIY, V. V.

USSR/Medicine - Plants
Medicine - Growth, Experiment Studies

Jun 48

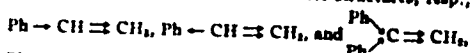
"Growth Substances," V. V. Razumovskiy, 1 $\frac{1}{2}$ pp

"Priroda" No 6

Briefly discusses various substances affecting
growth and development of plants.

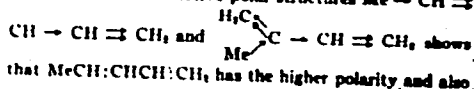
2/49775

Theory of electron tautomerism. III. Electronic structure and polymerisability of organic compounds. V. V. Razumovskii. *Zhur. Obshch. Khim.* [J. Gen. Chem.] 18, 1180-92 (1948); cf. C.A. 41, 913f; 42, 4001a. —Ability of an unsatd. compd. to polymerize is detd. mainly by its polarity or polarisability; the stability of the polymer obtained is the greater, the less strong (exothermal) the unsatd. bonds in the monomer mol. This principle explains the greater ease of polymerization of iso- C_4H_6 (dipole moment 0.49 D.), as compared with $CH_2=CHMe$ (0.35 D.). $Ph_3C=CH_2$ (0.5 D.) gives only the dimer, whereas the less polar $PhCH=CH_2$ (0.37 D.) gives a high-mol. polymer, because of the lesser strength of the double bond; the latter conclusion follows from considerations of the 2 electron-tautomeric structures, resp.,



$\text{Ph} \diagup \text{C} \equiv \text{CH}_2$. Introduction of Br, OMe, or NH_2 into
 $\text{Ph} \diagdown$

the PhCH:CH_2 ring increases the polarity but also
 lengthens the double bond; consequently, these sub-
 stituted derivs. give lower degrees of polymerization.
 On the same grounds, higher temp. increases the rate but
 lowers the degree of polymerization. An analogous con-
 sideration of the inductive-polar structures $\text{Me} - \text{CH} \equiv$



higher bond strength; consequently, $\text{CH}_2=\text{CN}=\text{CH}:\text{CH}_2$ must be more readily polarizable. In $\text{CH}_2::\text{CH}=\text{CH}=\text{CH}_2$, the electrons of one double bond are in the field of a secondary C atom; those of the other double bond, in the field of a tertiary C; in $\text{PhCH}=\text{CH}::\text{CH}=\text{CH}=\text{CPh}_2$, the electrons of both double bonds are in the field of tertiary C atoms; in $\text{Ph}_2\text{C}=\text{CH}::\text{CH}=\text{CH}=\text{CPh}_2$, the electrons of one double bond are in the field of a tertiary C, those of the other bond, in the field of quaternary C atom. As a result, $\text{CH}_2::\text{CHCH}:\text{CH}_2$ must be the most, $\text{Ph}_2\text{C}::\text{CHCH}:\text{CPh}_2$ the least, polarizable of the three.

On the basis of the formulas $\dot{\text{C}}\text{H}_2 \rightleftharpoons \text{CH}^- \leftarrow \text{C}^+ \begin{matrix} \nearrow \text{O}^- \\ \searrow \text{OR} \end{matrix}$ and $\text{Me} \begin{matrix} \nearrow \text{C}^- \\ \searrow \text{C} \end{matrix} \begin{matrix} \nearrow \text{O}^- \\ \searrow \text{OR} \end{matrix}$, the methacrylate, even though it is more highly polar than the acrylate, has the stronger double bonds; this accounts for the easier depolymerization of polymethacrylates.

RAZUMOVSKIY, V. V.

VA 1/10727

USSR/Chemistry - Organic Compounds
Chemistry - Polymerization

Jun 48

"Theory of Electronic Tautomerism. III. Electron Structure and the Ability of Organic Compounds to Polymerize," V. V. Razumovskiy, 4 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 6

Basic criterion of polymerization capacity of organic compounds is relationship between polarity and saturation of their molecules. Submitted 7 Jun 1947.

9/49727

RAZUMOVSKIY, V. V.

PA 47/49T103

USSR/Scientists
Chemists
Physical Chemistry

Jan 49

"V. Ya. Kurbatov (on His Seventieth Birthday and
Fiftieth Anniversary of His Scientific Work),"
V. V. Razumovskiy, 2 pp

"Priroda" No 1

Kurbatov is credited with many discoveries in liq-
uids, colloids, and gels. He has taught continu-
ously at the Leningrad Tech Inst imeni Lensovet,
and has been head of the Chair of Phys Chem for
42 years.

 47/49T103

AMBUCHENYI, V. I.

2360 AMBUCHENYI, V. I. 30 let Teorii i Stroyeniya Lolakul V. V. Markovilkova.
(1869-1949). Priroda, 1949, No. 7, S. 76-80 -- Bibliogr: S. 80, S. Portr.

30: Letopis, No. 32, 1949.

USSR/Chemistry - Compounds, Organic Jan 49
Chemistry - 1,2-Chlorofluoroethane,
Preparation

Preparation of 1,2-Chlorofluoroethane, "V. V.
Razumovskiy, A. E. Fridenberg, 2 3/4 pp

"Zhur Obshch Khim" Vol XIX, No 1

Heating of 2-chloroethyl ester of benzenesulfonic
acid with solid anhydrous potassium fluoride to
about 190° gave approximately a 35% theoretical
yield of 1-chloro-2-fluoroethane. With concen-
trated aqueous potassium fluoride in an autoclave
at 130 - 150°, yield was up to 60%. Dichloroethane

58/49T27

Jan 49

USSR/Chemistry - Compounds,
Organic (Contd)

was a by-product. From 2-bromoethyl benzene-
sulfonate a yield of up to 35% was obtained. It
is miscible with many organic solvents. Solubility
in water is 25 g/l. Submitted 9 Jun 47.

58/49T27

RAZUMOVSKIY, V. V.

CA

10

PREPARATION AND PROPERTIES

Preparation of 1-chloro-2-fluoroethane. V. V. Razumovskii and A. F. Erdenberg. *Zhur. Obshch. Khim.* (J. Gen. Chem.) 19, 92 (1949). $\text{PhSO}_3\text{CH}_2\text{CH}_2\text{Cl}$ and 1.15 moles KF (as a 47.0% aq. soln.) stirred 6 hrs. at 150° in a stainless steel autoclave (with periodic bleeding to keep the pressure at 2.3 atm.) gave a distillate composed of 20% (CH_3Cl) , 1.5% $\text{CH}_3\text{CH}_2\text{Cl}$, and 60% $(\text{CH}_3\text{CH}_2\text{F})$ (D, b. 52.3° , d_4^{20} 1.1747, d_4^{25} 1.2055, n_D^{20} 1.3575, l.p. below -50° , solv. in water 2.5% at room temp. Boiling l. with 7% NaOH hydrolyzes only 2% of the Cl in 2 hrs., 32% in 10 hrs. Heating an equimolar mixt. of the above reagents in a dry state at 180° gave some (CH_3Cl) , and 35% l. Heating $(\text{CH}_3\text{CH}_2\text{F})_2\text{SO}$ with 2 moles powd. KF at 175° gave 90% l. Heating $\text{PhSO}_3\text{CH}_2\text{CH}_2\text{Br}$ with aq. KF as given above gave 35% *tert*- $\text{H}_2\text{C}(\text{CH}_3)_2$ and some (CH_3Cl) . G. M. Kosolupoff.

RAZUMOVSKIY, V. V.

PA 37/49T6

USSR/Chemistry - Insecticides, Emulsion Feb 49
Medicine - Insecticides

"Insecticides," V. V. Razumovskiy, 1 p

"Priroda" No 2

Discusses choice of suitable emulsifier for use
with insecticides.

37/49T6

RAZUMOVSKIY, V. V.

USSR/Chemistry - Rubber, Synthetic (Gorin) Feb 49
Sinteticheskogo kauchuka imeni Akad S. V. Zhdanova"
No 1, 1948, pp 5 - 42.

Industrial synthesis of rubber by Acad S. V.
Lebedev's method is based on catalytic transforma-
tion of ethyl alcohol into divinyl. Systematic
investigations of Yu. A. Gorin have now shown that
catalysts which bring about ethyl-divinyl trans-
formation can be used to obtain rubber from various
alcohols. Summarizes Gorin's article in "Trudy
Vsesoyuznogo nauchno-issledovatel'skogo instituta

37/49T7

FA 37/49T7

"Pritoda" No 2

"Catalytic Conversion of Alcohols Into Rubber,"
V. V. Razumovskiy, 3/4 p

USSR/Chemistry - Rubber, Synthetic
Chemistry - Catalysts

Feb 49

37/49T7

RAZUMOVSKIY, V. V.

PA 37/49T9

USSR/Chemistry - Albumins Feb 49
Chemistry - Organic Compounds, Metallo-

"New Achievements in Soviet Chemistry," V. V.
Razumovskiy, 5 pp

"Priroda" No 2

Summarizes achievements of four Soviet chemists:
N. D. Zelinskiy (albumins), I. L. Knunyants (fluoro-
organic compounds), K. A. Kocheshkov (metallo-
organic compounds), and A. P. Terent'yev (sulfo acids
of aromatic and heterocyclic compounds), with four
photographs.

37/49T9

Apr 49

USSR/Academy of Sciences
Biology - Scientists

"S. N. Danilov", Corresponding Member, Academy
of Sciences USSR, " V. V. Razumovskiy, 2 $\frac{1}{2}$ pp

"Priroda" No 4

57/49T1
Reviews scientific achievements of S. N. Danilov
(follower of Butlerov-Favorsky school from which
developed the dynamic basis of organic chemistry)
in honor of his 60th birthday. In 1916, Danilov
discovered conversion of aldehydes into ketones
and established new laws of dynamics for organic
materials. Since 1930, he has been developing
57/49T1

Apr 49

USSR/Academy of Sciences (Contd)

technology of synthetic fibers. He has written
many articles appearing in "Priroda" and "Zhurnal
Obshchey Khimii," and has been active as an
instructor since 1915. Lists his membership in
various organizations (editor of "Zhurnal Obshchey
Khimii," etc.).

RAZUMOVSKIY, V. V.

57/49T1

USSR/Medicine - Cellulose
Chemistry - Organic Chemistry

Jun 49

"Molecular Weight of Cellulose," V. V. Razumovskiy,
1 p

"Priroda" No 6

PA 53/49T61

There are three principal methods for determining molecular weight of cellulose: (1) by sedimentation, (2) by diffusion, and (3) on the basis of viscosity, which involves dissolving cellulose in a copper-ammonia solution. However, in 1940, O. P. Golova and I. I. Nikolayev claimed that cellulose in a copper-ammonia solution undergoes a depolymerization process in which cellulose-glucose bonds

53/49T61

USSR/Medicine - Cellulose (Contd) Jun 49

are destroyed. Experiments showed cellulose in this solution had a molecular weight of 30,000 when it actually should have been 4,860,000.

RAZUMOVSKIY, V. V.

53/49T61

RAZUMOVSKIY, V.V.

28934 Preobrazovanie Prirody molekul. (Izbrannye deniya stalinskoy premii Za 1948 G. B.A. Kazanskomu Za Nauch. Trudy po organ, Khimii.) Prilozhenie, 1949, No 9 S. 3-7 S. Portr.-Bibliogr: 12 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

RAZUMOVSKIY, V. V.

USSR/Chemistry - Compounds, May/Jun 49
Organic
Chemistry - Molecules, Forces Within

"Intramolecular Reciprocal Effect of Atoms,"
V. V. Razumovskiy, Leningrad, 10 pp

"Uspekhi Khim" Vol XVIII, No 3

Review of literature on the intramolecular
mutual influence of atoms in organic compounds.

58/49728

, V. and Rukhina, Ye. P.

Structure and Reactivity of Aromatic Hydrocarbons. I. The Azo-Coupling
Reaction of Unsymmetrical Diphenyl Ethylene with p-Nitrophenyl Diazonium
Chloride, page 1005.

Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry),
Vol II, Moscow-Leningrad, 1953, pages 1600-1606.

Leningrad Electrical Engineering Inst of Communications Leningrad
Professor N. A. Borch-Bruzevich

RAZUMOVSKIY, V.V.

Vladimir Yakovlevich Kurbatov and his physicochemical studies. Zhur.
Obshchey Khim. 23, 529-37 '53. (MLBA 6:5)
(CA 47 no.19:9681 '53)

RAZUMOVSKIY, V.V.

U S S R .

~~Vladimir Yakovlevich Kurbatov and his physicochemical studies. V. V. Razumovskii. J. Gen. Chem. U.S.S.R. 23, 549-55 (1953) (Engl. translation).—See C.A. 47, 9081h.~~
H. L. H.

RAZUMOVSKIY, V.V.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Organic Chemistry

Structure and reactivity of aromatic hydrocarbons.
Reaction of azo coupling of unsymmetrical diphenylethylene
with *p*-nitrobenzenediazonium chloride. V. V. Razu-
movskiy and E. E. Ryckina (M. A. Bonch-Bruyevich
Electrotech. Inst. Commun., Leningrad). *Doklady Akad.
Nauk S.S.S.R.* 88, 839-41 (1953).—To a $\text{Ph}_2\text{C}=\text{CH}_2$ in
pyridine was added dropwise with stirring the calcd. amt.
of $p\text{-O}_2\text{NC}_6\text{H}_4\text{N}_2\text{Cl}$ at $20\text{--}5^\circ$, and the mixt., after standing
overnight, was kept $10\text{--}12$ hrs. at -10° , yielding a ppt.
which upon crystn. from C_6H_6 and petr. ether-EtOAc gave
10% yellow solid, $\text{C}_{17}\text{H}_{11}\text{O}_2\text{N}$ (I), m. 154° , identical with
Wizinger's (W. and Cyriax, *C.A.* 40, 6408⁹) product,
although W. assigned to it a wrong formula. I is the result
of decompn. of the normal azo deriv. with loss of N_2 .
With aq. KMnO_4 it gave BzPh and $p\text{-O}_2\text{NC}_6\text{H}_4\text{CO}_2\text{H}$, in-
dicating that it is $p\text{-Ph}_2\text{C}=\text{CHC}_6\text{H}_4\text{NO}_2$. It yields a di-
bromide (II), m. $178\text{--}8.5^\circ$. Reduction with Fe in AcOH
gave the corresponding amine; decomp. 137° , which upon
diazotization yields an orange dye with 2-hydroxynaph-
thanilide. The solu. left after isolation of I was neutralized
with dil. HCl and extd. with Et_2O , yielding, after evapn. and
prolonged standing, an unstated amt. of the 2nd product of
the azo coupling reaction, $\text{C}_{18}\text{H}_{11}\text{O}_2\text{N}$ (III), m. 150° (from
 C_6H_6), which forms a dibromide, m. $178\text{--}8.5^\circ$, identical
with I. III product was identified as $p\text{-Ph}_2\text{C}(\text{OH})\text{CH}_2\text{C}_6\text{H}_4\text{NO}_2$; with concd. H_2SO_4 it yields $p\text{-O}_2\text{NC}_6\text{H}_4\text{CH}=\text{CPh}_2$,
m. 154° .
G. M. Kosolapoff

RAZUMOVSKIY, V. V.

USSR/Scientists - Chemistry

Card 1/1 : Pub. 151 - 1/37

Authors : Razumovskiy, V. V.

Title : The development of the theory of the chemical structure by V. V. Markovnikov

Periodical : Zhur. ob. khim. 24/3, 393-413, Mar 1954

Abstract : Eulogy is presented, honoring the 50-anniversary of the death of Vladimir Vasilyevich Markovnikov, a famous Russian chemist. The various works of Markovnikov and his great contributions to the development of the theory of chemical structure are listed. Among other things Markovnikov is also credited with the development of the idea of electrons in organic chemistry which later led to the development of laws governing the intramolecular mutual effect of atoms and to the discovery of the nature of chemical bonds in various organic compounds. Eighty-three USSR references (1853-1953).

Institution :

Submitted : December 16, 1953

RAZUMOVSKIY, V.V.

On organic molecular structure. Zhur.ob.khim.25 no.6:1235-1239
Je'55. (MIRA8:12)

(Stereochemistry)

L 21502-66 EWT(m)/EPF(n)-2/EWP(t)
ACC NR: AP6008086

IJP(c) JD/WH/JG

SOURCE CODE: UR/0063/66/011/001/0106/0110

AUTHOR: Razumovskiy, V. V. (Professor)

ORG: none

TITLE: Progress in Soviet chemistry

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 11, no. 1, 1966,
106-110

TOPIC TAGS: chemical conference, chemical reaction, atomic structure, periodic system, semiconducting material, polymerization, metal purification, inert gas, organic synthetic process, inorganic synthesis, chemical purity, quantum mechanics, molecular structure, ultra high purity metal, ionization potential

ABSTRACT: In recent years (1963-1965), current topics reflecting progress in Soviet chemistry have been discussed in sessions of the Historical Section, Leningrad District Board, All-Union Chemical Society. The main topics dealt with: new concepts of atomic and molecular structures leading to synthesis of new inorganic compounds, semiconductors, and organic polymeric materials; preparation of high-purity substances; reactivity of inert gases; quantum mechanics and advanced

Card 1/3

UDC: 541.6

L 21502-66

ACC NR: AP6008086

12

interpretation of the Periodic Table of the Elements, etc. The following papers are among those presented at the sessions. Goryunova, N. A., Prof. (Institute of Physics and Engineering): Semiconductor Compounds in Inorganic Chemistry. The author discussed the formation of semiconductor phases with stable electron configurations which agree with the law of chemical analogies. More experimental and theoretical work is needed for the development of this approach as basis for the preparation of semiconductors with predetermined properties.

Plechko, R. L. (Leningrad Polytechnical Institute): Synthesis of Ternary Semiconductor Systems. The author discussed new methods for the preparation of ternary semiconductor systems in a gas flow and from ternary melts (e. g., semiconductors of the type $A^2B^4C_2^5$ and $A^3B^5C_4^9$).

Baymakov, Yu. V., Prof. (Leningrad Polytechnical Institute) discussed methods for the preparation of ultra-pure metals with a total amount of impurities $< 1 \cdot 10^{-5}\%$. The refining of Ti, Cr, V, Zr, Be from fused salts results in purities equal to those obtained by the iodide method, and is a more convenient process.

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L 21502-66

ACC NR: AP6008086

Shchukarev, S. A., Prof. (Leningrad State University): Electron-rich and Electron-poor Compounds. Great importance was attributed to energy characteristics of diatomic homo- and heteronuclear molecules, and isoelectronic N_2 , CO, and BF as a transition group between electron-rich and electron-poor molecules. According to the author, this school may have greater importance in chemical progress than Pauling's theory on the effect of the electronegative difference on chemical-bond energies. 4

Shishokin, V. P., and Ye. B. Sysoyeva (Leningrad Polytechnical Institute) discussed the relation between the mean ionization potential and the position of the given element in the Periodic Table of the Elements. Orig. art. has: 1 figure. [ATD PRESS: 4195-F]

SUB CODE: 07, 20, 11 / SUBM DATE: none

Card 3/3 dda

L 05129-67 EWT(m)/EWP(1) RM

ACC NR: AP7000745

ZAVLIN, P. M., KOR'YAKOV, O. P., RAZUMOVSKIY, V. V.

SOURCE CODE: UR'0079/66/036/005/0945, 0000

"O-beta-Aminoethyl-O-ethyl Ester of Methylphosphinic Acid and Its Conversions"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 5, 1966, p 945

Abstract: The reaction of the chloride of the ethyl ester of methylphosphinic acid with ethanolamine (without a solvent) leads to the formation of the hydrochloride of O-beta-aminoethyl-O-ethyl ester of methylphosphinic acid in quantitative yield. When this hydrochloride is treated with sodium alcoholate, the free base -- O-beta-aminoethyl-O-ethyl ester of methylphosphinic acid -- is isolated. This compound readily undergoes homopolycondensation, yielding a resin with molecular weight 1400-1800. corresponding to a coefficient of polymerization of 11-14.

[IPRS: 37,023]

TOPIC TAGS: phosphinic acid, polycondensation

SUB. CODE: 07 / SUBM DATE: 19Nov65 / ORIG REF: 002

Card 1/1

vmb

UDC: 547.26.118

ACC NR: AP7012404

SOURCE CODE: UR/0063/66/011/006/0696/0699

AUTHOR: Mishchenko, K. P. (Professor); Razumovskiy, V. V. (Professor)

ORG: none

TITLE: Third Conference on Chemistry and Application of organophosphorous compounds at the Leningrad Oblast Board of the All-Union Chemical Society imeni D. I. Mendeleyeva

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 11, no. 6, 1966, 696-699

TOPIC TAGS: organic phosphorus compound, scientific conference, organic chemical synthesis

SUB CODE: 07

ABSTRACT: The third conference on chemistry and application of organophosphorous compounds was held in Leningrad in March 1966. It was organized by the Leningrad Oblast Board of the All-Union Chemical Society imeni D. I. Mendeleyeva conjointly with the section on general chemistry of the Central Board of the All-Union Chemical Society imeni D. I. Mendeleyeva. At this conference, outstanding problems on the theoretical aspects of the chemistry of phosphorous and new achievements in the field of synthesis and application of organophosphorous compounds were considered. S. A. SHCHUKAREV, of the
Card 1/2

UDC: 661.718.1

ACC NR: AP7012404

Leningrad State University, considered the question of phosphorous bonds from the standpoint of orbital radii, obtained by integrating equations. The author was able to show the existence of significant mutual polarization of atoms, the interaction of electron configurations, partial excitation of valency states, and the role of d-electrons. Other papers were presented on the carbon-phosphorous bond at energies approaching 62 kilocalories, research on organophosphorous compounds employing nuclear magnetic resonance, the chemistry of phosphorous isocyanates, and diisocyanates. E. Ye. Nifant'yev, presented a report on the chemistry of esters of acids containing trivalent phosphorous and sugars. Other papers covered alkylation of glycoamidophosphites, thermal conversion of amidoesters of methylphosphonic acid, the kinetics of thermal conversion of amidoesters of methylphosphonic acid, and others. Acknowledgment to Corresponding Member AN SSSR A. A. Petrov; Professor A. P. Brestkin; Doctor of Chemical Sciences G. I. Derkach; Professor V. V. Figulevskiy; Professor V. V. Razumovskiy; Professor R. N. Sterlin; Professor S. A. Shchukarev, V. N. Aleksandrov, P. M. Zavlin, B. I. Ionin, N. A. Loshadkin, A. A. Neymysheva, E. Ye. Nifant'yev, N. A. Razumova, and others took part in the discussion of the reports. Orig. art. has: 6 formulas. [JPRS: 40,422]

L 8126-66 EWT(m)/EPF(c)/EWP(j)/T/ETC(m) WW/RM
 ACC NR: AP5025024 44.55 SOURCE CODE: UR/0286/65/000/016/0081/0081
 AUTHORS: Zavlin, P. M.; Razumovskiy, V. V. 44.55
 ORG: none
 TITLE: Method for obtaining polyphosphonates. Class 39, No. 173934 /announced by Leningrad Electrotechnical Institute for Communications im. professor M. A. Bonch-Bruyevich (Leningradskiy elektrotekhnicheskii institut svyazi) 44.55
 SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 81 44.55
 TOPIC TAGS: phosphonic acid, ester, phosphorus organic compound, self extinguishing compound
 ABSTRACT: This Author Certificate presents a method for obtaining polyphosphonates by thermal homopolycondensation of aminoethyl esters of phosphonic acids. To increase the numbers of self-extinguishing polyphosphonates, di-(β -amino ethyl ester) of methylphosphonic acid is used as the starting material.
 SUB CODE: OC/ SUBM DATE: 30Sep64
 nw
 Card 1/1 UDC: 678.674 678.85

MAKARENIYA, A.A., kand. khim. nauk; ZAVLIN, P.M., kand. khim.
nauk; RAZUMOVSKIY, V.V., prof., red.

[Chemistry textbook] Uchebnoe posobie po khimii. Lenin-
grad. Leningr. elektrotekhn. in-t sviazi, 1964. 134 p.
(MIRA 18:7)

ZAVLIN, P.M.; RAZUMOVSKIY, V.V.

Homopolycondensation of di-(β -aminoethyl ester) of methyl-
phosphinic acid. Vysokom. soed. 7 no.8:1415-1416 Ag '65.
(MIRA 18:2)

1. Leningradskiy elektrotekhnicheskij institut svyazi.

L 64557-65 EWT(m)/EPF(c)/ENR(j)/T RM

ACCESSION NR: AP5020971

UR/0190/65/007/008/1415/1416

541.64+678.86

30

AUTHOR: Zavlin, P. M.; Razumovskiy, V. V.

27

TITLE: Homopolycondensation of di(β-aminoethyl)methylphosphinate

6

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 8, 1965, 1415-1416

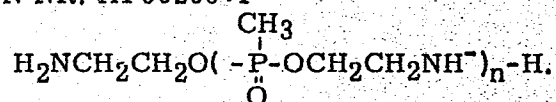
TOPIC TAGS: organic synthesis process, polycondensation, polymerization, phosphorous, polyamide, ester

ABSTRACT: Phosphorus-containing aminoalkyl esters made by reaction of phosphorous acid chloroanhydrides with aliphatic aminoalcohols undergo thermal transformations and cannot be used for the preparation of phosphorus-containing polymers by high temperature polycondensation. Di(β-aminoethyl)methylphosphinate would not undergo polycondensation with aliphatic dicarboxylic acid dichloroanhydrides. However, it did undergo homopolycondensation at 200-215C to form phosphorus-containing polyamido-polyester polymers having terminal primary amino groups:

Card 1/2

L 64557-65

ACCESSION NR: AP5020971



The polymers softened at 95-100C and had a molecular weight of 1500-2000. It was suggested the reaction proceeded through a stage of cyclic amido ester formation with subsequent polymerization of the latter. Orig. art. has: 4 equations.

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut svyazi (Leningrad Electrotechnical Institute of Communications)

SUBMITTED: 24Sep64

ENCL: 00

SUB CODE: CC, GC

NR REF SOV: 003

OTHER: 000

Card 2/2

RAZUMOVSKIY, V.V., prof.

Problems of the history of chemistry in the work of the Mendeleev
All-Union Chemical Society. Zhur. VKHO 8 no.6:686-689 '63.
(MIRA 17:2)

RAZDAROVICH, V.V.

Basic aspects of the theory of electronic tautomerism in
the light of newest electronic concepts. (Russ. ch. 1991)
Iz. no. 5:1693-1696. 1971. (MIRA 17:17)

AKHUMOV, Ye.I.; VUL'FSON, V.I.; GRIGORIADI, P.K.; MAKSIMYUK, Ye.A.;
RAZUMOVSKIY, V.V.; UGOL'NIKOVA, G.A.

Chemistry and radio engineering. Izv. vys. ucheb. zav.; radiotekh.
4 no.4:502-503 J1-Ag '61. (MIRA 14:11)

1. Komissiya seksii prepodavaniya Leningradskogo oblastnogo prav-
leniya Vsesoyuznogo khimicheskogo obshchestva imeni D.I.Mendeleyeva.
(Radio) (Chemistry)

25392
S/080/61/034/002/012/025
A057/A129

5 3600

AUTHORS: Kutepcv, D.F., Potashnik, A.A., Razumovskiy, V.V.

TITLE: Preparation of 2,4,5-trichloroaniline from nontoxic isomers of hexachlorocyclohexane

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 362-366

TEXT: A method is described for the preparation of trichloroaniline from nontoxic hexachlorocyclohexane (666) isomers by nitration of 1,2,4-trichlorobenzene to 2,4,5-trichloronitrobenzene and reduction of the latter to 2,4,5-trichloroaniline. Reduction is carried out in an aqueous medium with pig iron turnings in the presence of an emulsifier of the non-ionic "OP-7" ("OP-7") or "OP-10" ("OP-10") type. The following procedure is presented: 95 g nontoxic 666-isomers, 100 ml H₂O and 40 g air-slaked lime are filled into an autoclave. The reaction occurs by mixing at 160-170°C and 6.3-8.1 atm in 2 hrs. The product is separated from slurry and the

Card 1/4

Preparation of 2,4,5-trichloroaniline ...

25392
S/080/61/034/002/012/025
A057/A129

obtained trichlorobenzene distilled at 50-100 torr with a yield of 51.8 g (87.5%). Then 2,4,5-trichloronitrobenzene is prepared by mixing 1 part HNO_3 + 4 parts H_2SO_4 (acid concentration in the mixture 92-93%) at 40-50°C with 1.3 weight parts of 1,2,4-trichlorobenzene. The latter is added during 1.5 hr, and then the mixture kept for 2 hrs at 80°C. The product is separated from the nitration mixture and washed 2-3 times with hot water. The obtained crystals can be recrystallized and are soluble in ether, benzene, ethanol and acetone (see Tab.). In order to obtain 2,4,5-trichloroaniline 10 g of 2,4,5-trichloronitrobenzene, 13 g pig iron turnings, 0.25 g "OP-7" emulsifier and 50 ml water are filled into the reactor. The latter is thermostated to 18-20°C and during 30-45 min 2.5 ml of concentrated hydrochloric acid is added by drops and agitating. Then the mixture is heated for 1 hr to 70-80°C and then for 4-5 hrs to 100°C. By steam distillation (directly from the reactor) 7.8 g (90% yield) of pure 2,4,5-trichloroaniline with a melting point of 95-96°C can be obtained. There are 1 table and 11 references: 6 Soviet-bloc and 5 non-Soviet-bloc. Three of the English-language publications read as follows: H. Hangson, J. White-

Card 2/4

25392

Preparation of 2,4,5-trichloroaniline ...

S/080/61/034/002/012/025
A057/4:29

hurst, J. Chem. Soc., 202 (1945); B. Stewart et al., J. Chem. Soc., 66, 1781
(1944); R. Slade, Chem. Ind., 64, 314 (1945).

SUBMITTED: July 19, 1960

X

Card 3/4

RAZUMOVSKIY, V.V.

M.D.L'vov's research in the field of organic chemistry. Trudy Inst.
ist.est.1 tekhn.30:175-183 '60. (MIRA 13:8)
(L'vov, Mikhail Dmitrievich, 1848-1899)

YAKUBOVICH, A.Ya.; BOGOSLOVSKIY, N.A.; PRAVOVA, Ye.P.; BELYAYEVA, I.N.;
RAZUMOVSKIY, V.V.

Syntheses of vinyl monomers. Part 11: Synthesis of α -chloro-
hydroacrylates and α -chloroacrylates. Zhur.ob.khim. 30 no.8:
2496-2498 Ag '60. (MIRA 13:8)
(Acrylic acid)

VINOGRADOV, V.M.; RAZUMOVSKIY, V.V.; SEROVA, L.V.; TARZIMANOV, P.F.;
KOZHEVNIKOV, O.V.; PICHUGIN, B.M.; PROKOP'EV, I.V.; FEDOROV, B.A.;
KOSHENTAYEVSKIY, V.S.; IVANOVA, A.S.; SNIGIREV, V.G., YASHCHENKO,
G.I.; VORONKOVA, Ye.A.; ZAMYATINA, A.A.; SERGEYEV, N.A.; KUREPOV,
A.I.; POPOV, B.L.; FINOGENOV, V.P., NABOROV, V.B.; CHENCHIKOVSKIY,
S.F.; IVANOV, Ye.A.; ALKHIMOV, V.S., red.; VINOGRADOV, V.M., red.;
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